abcam

ab250027

Anti-hnRNP M1-M4 antibody [EPR13509(B)] - BSA and Azide free

Recombinant RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR13509(B)
Purification technique	Affinity purification Protein A

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Expected

Species	Mouse, Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information HNRNPM

Function	Pre-mRNA binding protein in vivo, binds avidly to poly(G) and poly(U) RNA homopolymers in vitro. Involved in splicing. Acts as a receptor for carcinoembryonic antigen in Kupffer cells, may initiate a series of signaling events

leading to tyrosine phosphorylation of proteins and induction of IL-1 alpha, IL-6, IL-10 and tumor necrosis factor alpha cytokines.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250027 is the carrier-free version of ab177957.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Heterogeneous nuclear ribonucleoproteins M1-M4 often referred to as hnRNP M or hnRNPM are components of a family of RNA-binding proteins. These proteins have a molecular mass of approximately 77 kDa. They localize primarily in the nucleus but can shuttle between the nucleus and cytoplasm. hnRNP M plays a critical role in mRNA processing including splicing and transport. These proteins are ubiquitously expressed in many tissues highlighting their significance in numerous cellular processes.
Biological function summary	HnRNP M1-M4 are integral to RNA metabolism and the post-transcriptional regulation of gene expression. They participate in the spliceosome complex and influence alternative splicing events by interacting with pre-mRNA. Their binding activity modulates exon inclusion or exclusion contributing to the diversity of the

	proteome. hnRNP M also interacts with other RNA-binding proteins facilitating various RNA processing events.
Pathways	The activities of hnRNP M1-M4 intersect significantly with the RNA splicing machinery and mRNA transport pathways. They are integral to the spliceosome pathway and are known to interact with other splicing factors such as serine/arginine-rich proteins. This interaction is central to the regulation of alternative splicing. hnRNP M also influences the mRNA surveillance pathway ensuring proper mRNA maturation before export to the cytoplasm.
Associated diseases and disorders	HnRNP M1-M4 are associated with cancer and neurodegenerative diseases. Aberrations in hnRNP M expression or function can lead to altered splicing patterns fostering oncogenic processes. Furthermore changes in their activity have been observed in conditions like Alzheimer's disease where they may interact with tau protein and contribute to pathogenesis by affecting tau mRNA splicing. Understanding their role in these contexts provides insights into the mechanisms underpinning these diseases and informs potential therapeutic targets.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

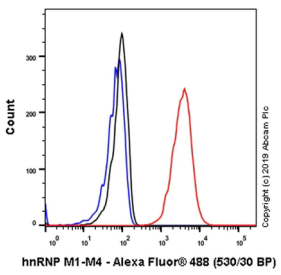
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

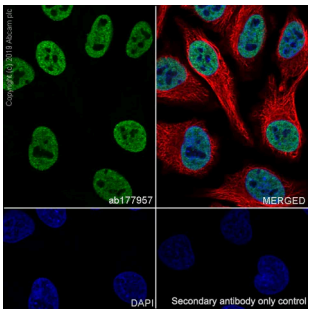
5 product images



Flow Cytometry (Intracellular) - Anti-hnRNP M1-M4 antibody [EPR13509(B)] - BSA and Azide free (ab250027)

HnRNP M1-M4 Flow Cytometry (Intracellular) staining using rabbit Anti-hnRNP M1-M4 antibody

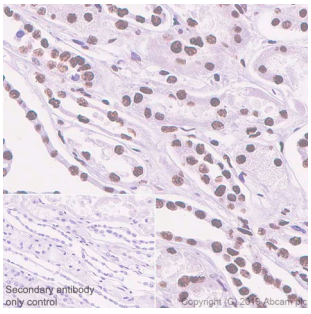
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling hnRNP M1-M4 with Purified ab177957 at 1/100 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab177957)



Immunocytochemistry/ Immunofluorescence - Anti-hnRNP M1-M4 antibody [EPR13509(B)] - BSA and Azide free (ab250027)

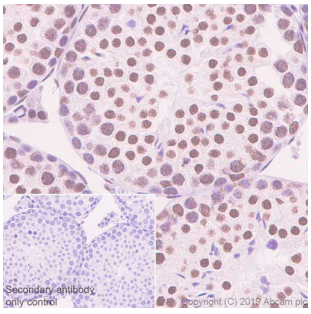
HnRNP M1-M4 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-hnRNP M1-M4 antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling hnRNP M1-M4 with Purified ab177957 at 1:100 dilution (9.7 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab177957)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP M1-M4 antibody [EPR13509(B)] - BSA and Azide free (ab250027)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling hnRNP M1-M4 with Purified ab177957 at 1:4000 dilution (0.24 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab177957)

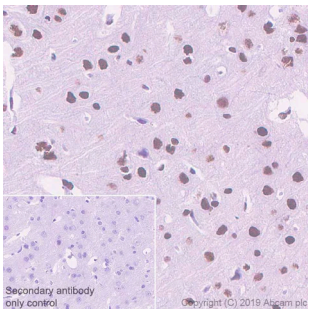


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP M1-M4 antibody [EPR13509(B)] - BSA and Azide free (ab250027)

HnRNP M1-M4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-hnRNP M1-M4 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse testis tissue sections labeling hnRNP M1-M4 with Purified ab177957 at 1:4000 dilution (0.24 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab177957)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-hnRNP M1-M4 antibody [EPR13509(B)] - BSA and Azide free (ab250027)

HnRNP M1-M4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-hnRNP M1-M4 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling hnRNP M1-M4 with Purified ab177957 at 1:4000 dilution (0.24 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab177957)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.